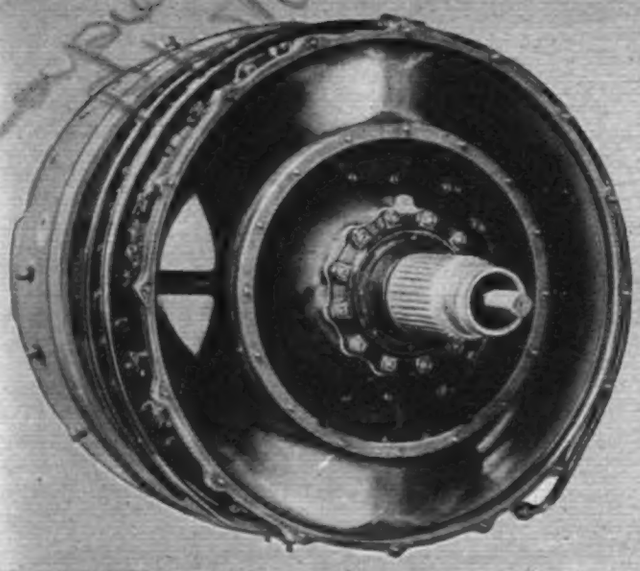
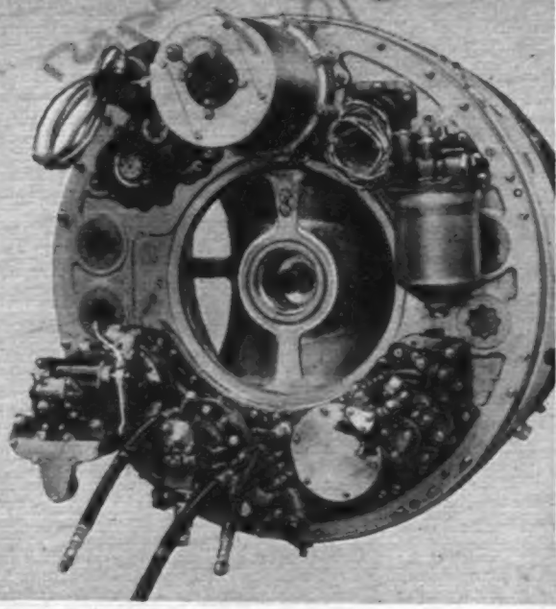


Left : Three-quarter view of reduction gear casing showing the integral bifurcated entry to the compressor.



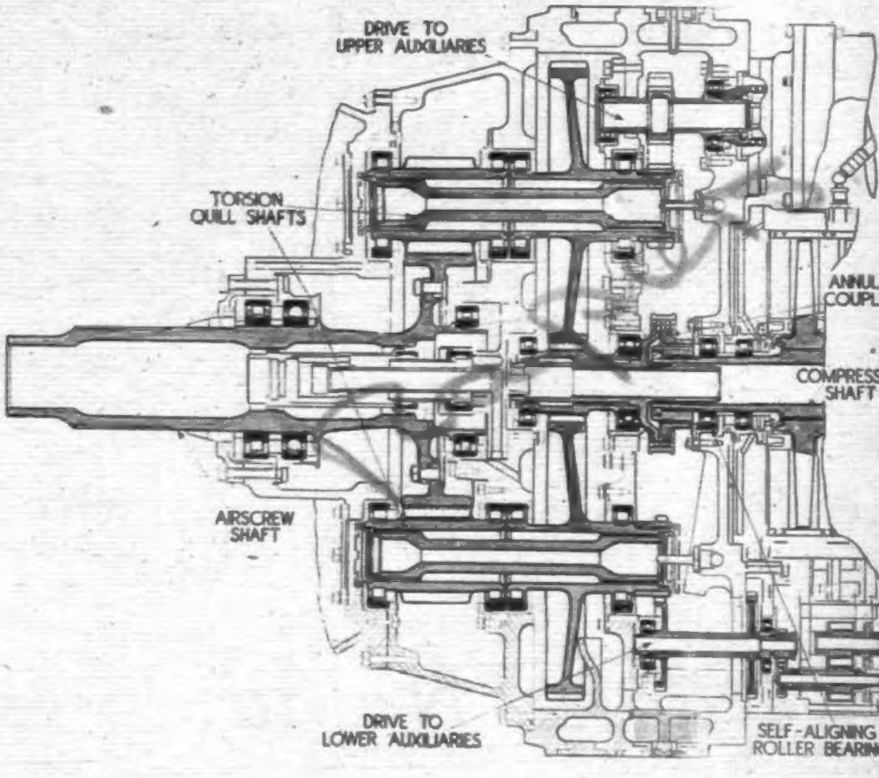
Right : Rear face of reduction gear showing the various engine accessories mounted around the air inlet orifices.

function of layshafts, have the added advantage that the torsional flexibility they provide ensures an even load distribution through the duplicated elements of the drive.

A pinion on the tail of the upper layshaft meshes with an idler which, in turn, meshes with the starter drive pinion. A second wheel on the idler shaft mates with the pinion which gives drive to the remote auxiliaries' gear box input shaft, and adjacent to the auxiliary drive pinion is a further wheel meshing with the gear driving the tachometer generator. Both the starter and the tachometer generator are carried direct off the end-wall of the gear box casing, and the drive shaft for the auxiliaries' gear box runs back the length of the engine to terminate with a universal half-coupling at the fireproof bulkhead.

In somewhat similar fashion, a pinion on the tail of the lower layshaft drives a secondary layshaft to power a battery of pumps carried off the lower part of the reduction gear casing. Of these pumping units, the secondary layshaft is directly coupled to a two-stage scavenge pump and gives drive port and starboard to a pair of fuel pumps, further extension of the driving train being made, to starboard, to the main oil pressure pump and, to port, via an idler wheel, to the airscrew constant-speed unit.

There is no rigid connection between compressor and reduction gear to impede the axial flexibility of the rotating parts and, further to this end, the front bearing assembly of the compressor shaft incorporates a specially designed self-aligning roller bearing, whilst the torque transmission is accommodated by an annular coupling, the small size of which makes surprising its ability to transmit 1,500 h.p.; the torque loading on this coupling is, however, relatively low—440 lb/ft—as the



Vertical section through reduction gear showing main and secondary drive members, together with the various bearing assemblies and the forward annular coupling

At left below is one half of the compressor drum complete with its stator assemblies, whilst at right can be seen the turbine assembly together with delivery manifold and mounting frame.